

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL04/00046

Box IV TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

NEW ABSTRACT

The present invention is of system, device, and method for detection, localization, and characterization of plaque-induced stenosis of a blood vessel. More particularly, the present invention relates to a balloon catheter (101) having an expandable balloon (100) insertable into a blood vessel, which balloon comprises a plurality of pressure sensor (110, 120, 130, 140) operable to detect stenosis of the vessel, and further operable to report degrees of compressibility of stenotic regions of plaque within the vessel, thereby distinguishing between standard and vulnerable plaque.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL04/00046

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/02

US CL : 600/486, 485, 585

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/486, 485, 585, 481, 488, 561, 585, 424, 431, 437; 604/96.01, 97.01, 98.01, 104

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,178,153 A (EINZIG) 12 January 1993 (12.01.1993), column 18, line 55 to column 24, line 13.	1, 2, 4-6
Y		3, 7-12
Y	US 3,831,588 A (RINDNER) 27 August 1974 (27.08.1974), column 2, lines 16-20.	3
Y	US 4,211,233 A (LIN) 08 July 1980 (08.07.1980), column 3, lines 47-50.	7
Y	US 5,259,837 A (VAN WORMER) 09 November 1993 (09.11.1993), column 3, line 53 to column 4, line 19.	8-12
A	US 5,865,801 A (HOUSER) 02 February 1999 (02.02.1999), column 5, line 54 to column 6, line 40.	13

☐

Further documents are listed in the continuation of Box C.

☐

See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

18 September 2004 (18.09.2004)

Date of mailing of the international search report

16 NOV 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Navin Nathani

Telephone No. (703) 308-1148